MAR 1 1 2002

RULE 63 (37 C.F.R. 1.63) ARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

PW FORM

DECLARATIONS

IN THE STATES PATENT AND TRADEMARK OFFICE

As a below named inventor, I hereby declare that the post office address and citizenship are as stated below next to my name, and I

pelieve I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed	
pelow) of the subject matter which is claimed and for which a patent is sought on the <u>INVENTION ENTITLED</u>	
TIMING RECOVERY WITH VARIABLE BANDWIDTH PHASE- LOCKED LOOP AND NON-LINEAR	
IMMAG NECOVERY WITH VARIABLE BANDING THE TOOL ED TOO. THE THE THE THE	

CONTROL F		H VARIABLE BAI					COPY OF PAI
		L (OUTOK E - L) St	2V/EC\ \				ORIGINALLY
	specification of whice is attached hereto	ch (<u>CHECK</u> applicable <u>Bo</u>	DX(ES))				Oniditaries
				as U.S. Application No.	10/003,330		*****
→ →	C. Was filed as	PCT International A	pplication	No. PCT//	On		
nd (if applicable	to U.S. or PCT apr	olication) was amended o	n				
bove. I acknowled preign priority bene pplication which de entificate or PCT in	ige the duty to disclos efits under 35 U.S.C. 1 esignated at least one ofernational Application	e all information known to me 19(a)-(d) or 365(b) of any for other country than the Unite	e to be materia reign application ad States, listen e disclosing the	ied specification, including the c al to patentability as defined in 3 on(s) for patent or inventor's cer d below and have also identified le subject matter claimed in this ng date of this application:	7 C.F.R. 1.56 tificate, or 36 I below any fo	i. Except as no 5(a) of any PC preign application	oted below, I hereby claim I International On for patent or inventor's
RIOR FORFIGN	N APPLICATION(S	1		Date first Laid-	Date Pa	tented	
umber	Country	Day/MONTH/Ye	ar Filed	open or Published	or G	<u>Franted</u>	Priority NOT Claimed
ccept as noted bell CT international application is in add	low, I hereby claim do pplications listed abov lition to that disclosed	e or below and, if this is a co in such prior applications. I a	35 U.S.C. 119 Intinuation-in-packnowledge th	age. (e) or 120 and/or 365(c) of the in part (CIP) application, insofar as the duty to disclose all information ch prior application and the nati	s the subject r In known to m	natter disclose e to be materia	u and claimed in this il to patentability as
RIOR U.S. PRO	VISIONAL, NONP	ROVISIONAL AND/OR F	CT APPLIC	ATION(S)	<u>Status</u>		Priority NOT Claimed
pplication No.	(series code/seria	l no.) Day/MON	TH/Year File	<u>ed</u> <u>pending.</u>	<u>abandoned</u>	<u>, patented</u>	
•							
ection 1001 of Title	le 18 of the United Sta	tes Code and that such willfu	il false stateme up. 1600 Tvso	ents and the like so made are prents may jeopardize the validity ons Boulevard, McLean, VA 221 tress) individually and collective	of the applica	ation or any pat number (703)	ent issued thereon. 905-2000 (to whom all
ansact all busines persons no longe ands/sent this case	s in the Patent and Tr er with their firm and to e to them and by who	ademark Office connected the act and rely on instructions m/which I hereby declare tha	erewith and wi	ith the resulting patent, and I he municate directly with the person nted after full disclosure to be re	reby authorize n/assignee/att	e them to delete ornev/firm/ ora	e names/numbers below anization who/which first
nd/or a below attor	rney in writing to the c	ontrary.	32995	Sean Fitzgerald	32027	James R. Th	
Lloyd Knight	17698 18221	David A. Jakopin Robert D. Anderson	33826	Leo V. Novakoski	37198	Peter Lam	ein 31710 44855
eorge M. Sirilla lan K. Aldous	31905	Cynthia Thomas Faatz	39973	Mark Seeley	32299	Gene I. Su	45140
effrey S. Draege		Charles A. Mirho	41199	Raymond J. Werner	34752	Seth Z. Kaiso	
avid J. Kaplan	41105	Kenneth M. Seddon	43105	Calvin E. Wells	43256	Naomi Obina	ito 393
homas C. Reyn	olds 32488	Steven C. Stewart	33555	Evan Finkel	49059	Steven C. Sk	cabrat 362
loward A. Skais		Thomas Raleigh Lane	42781	W. Patrick Bengtsson	32456	Robert G. W	inkle 374
harles K. Young	g 39435	Mark G. Paulson	30793	Jack S. Barufka	37087	Robin L. Tesl	kin 🚜
	28872	Stephen C. Glazier	31361	Adam R. Hess	41835	Anthony L. M	inkle kin liele liters
Dale S. Lazar	28458	Paul F. McQuade	31542	William P. Atkins	38821	Robert J. Wa	iters 💯 🐪
oale S. Lazar Glenn J. Perry				Dauli Charre	36UV 4		receiv a 11
Dale S. Lazar Blenn J. Perry B. Paul Edgell	24238	Richard H. Zaitlen	27248	Paul L. Sharer	36004 35468	Jeffrey D. Ka	icesti _{s in the}
Oale S. Lazar Glenn J. Perry G. Paul Edgell Roger R. Wise	24238 31204	Richard H. Zaitlen Joseph R. Bond	36458	Richard C. Calderwood	36004 35468	1. 1) E
Dale S. Lazar Glenn J. Perry G. Paul Edgell Roger R. Wise	24238 31204 S SIGNATURE:			Richard C. Calderwood Date:		$\frac{14}{00}$	2
oale S. Lazar Glenn J. Perry G. Paul Edgell Roger R. Wise	24238 31204 S SIGNATURE: Hiroshi	Joseph R. Bond	36458 Cartes	Richard C. Calderwood Date: TAKATORI	35468	'×/00	
oale S. Lazar Glenn J. Perry G. Paul Edgell Roger R. Wise	24238 31204 S SIGNATURE: Hiroshi	Joseph R. Bond	36458	Richard C. Calderwood Date: TAKATORI	35468	K/OO	
bale S. Lazar Glenn J. Perry G. Paul Edgell Roger R. Wise 1) INVENTOR'S	24238 31204 S SIGNATURE: Hiroshi	Joseph R. Bond Minoshila First	36458 Cartes	Richard C. Calderwood Date: TAKATORI	35468	'×/00	
ale S. Lazar Slenn J. Perry S. Paul Edgell Roger R. Wise 1) INVENTOR'S	24238 31204 S SIGNATURE: Hiroshi	Joseph R. Bond ///www.shy//u First City	Middle Ini	Richard C. Calderwood Date: TAKATORI	35468	K/OO	
Pale S. Lazar Glenn J. Perry G. Paul Edgell Roger R. Wise 1) INVENTOR'S Residence	24238 31204 s signature: Hiroshi Sacramento	Joseph R. Bond Microsoly / M. First	Middle Ini	Richard C. Calderwood Date: TAKATORI tial	35468	K/OO	
Dale S. Lazar Glenn J. Perry G. Paul Edgell Roger R. Wise	24238 31204 s signature: Hiroshi Sacramento	Joseph R. Bond ///www.shy//u First City	Middle Ini	Richard C. Calderwood Date: TAKATORI tial	35468	K/OO	

ORIGINALLY FILED

Rule 56(a) & (b) = 37 C.F.R. 1.56(a) & (b) NT AND TRADEMARK CASES - RULES OF PRACTICE DUTY OF DISCLOSURE

(a) ...Each individual ciated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the [Patent and Trademark] Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability...(b) information is material to patentability when it is not cumulative and (1) It also establishes by itself, or in combination with other information, a prima facie case of unpatentability of a claim or (2) refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability

PATENT LAWS 35 U.S.C.

§102. Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless--

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent or
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or
- (c) he has abandoned the invention, or

The Ann

ä

j.

fl

- the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months* before the filing of the application in the United States, or

 the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has
 - the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent, or
 - (f) he did not himself invent the subject matter sought to be patented, or
 - before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

§103. Condition for patentability; non-obvious subject matter

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forther section 102 of this title, if the differences between the subject matter sought to be patented and the art are such that the subject matter as a whole would have been obvious at the time the made to a person having ordinary skill in the art to which said subject matter pertains. Patential all not be negatived by the manner in which the invention was made....
- (c) Subject matter developed by another person, which qualified as prior art only under subsection 102 of this title, shall not preclude patentability under this section where the subject claimed invention were, at the time the invention was made, owned by the same person obligation of assignment to the same person.

the

to an

^{*} Six months for Design Applications (35 U.S.C. 172).